BRAZHNIK, L., inzh.

Electrothermal method of tightening reinforcement. Bud. mat. i konstr. 4 no.1:24-30 Ja-F '62. (MIRA 15:7)

(Concrete reinforcement)

EL'PERIN, I.T.; BRAZHNIK, L.G.

"Advances in magnetohydrodynamics"; collection of articles.
Inzh.-fiz.zhur. 6 no.10:137-139 O '63. (MIRA 16:11)

KURNEVICH, G.I.; ALEKHINA, G.V.; BRAZHNIK, L.G.

Infrared spectra of chromium (III) compounds with methionine. Zhur.neorg.khim. 10 no.8:1942-1943 Ag '65. (MIRA 19:1)

1. Submitted October 23, 1964.

BRAZHNIK, Leonid Ivanovich; CHEPURINA, Nikolay Petrovich; ZELENYY,
Il'ya Iosifovich; AZARNINA, N.I., red.; YEREMINA, I.A.,
tekhn. red.

[Prestressing of reinforcements using an electric heating
technique] Napriazhenie armatury metodom elektronagreva.
Kiev, Gosstroiizdat, USSR, 1963. 96 p. (MIRA 17:1)
(Prestressed concrete)
(Concrete reinforcement)

56-34-4-14/60

AUTHORS: Al'tshuler, L. V., Krupnikov, K. K., Ledenev, B. N., Zhuchikhin, V. I., Brazhnik, M. I.

TITLE: The Dynamic Compressibility and the Equation of State of Iron at High Pressures (Dinamicheskaya szhimayemost' i uravneniye sostoyaniya pri vysokikh davleniyakh)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol. 34, Nr 4, pp. 874 - 885 (USSR)

ABSTRACT: This work discusses 2 methods for the description of the dynamic compressibility of materials, which are based upon the determination of the kinematic parameters - the propagation velocity and the mass velocity of the material behind the front. The measurement of wave velocities by means of donors being mounted in the path of the shock wave is relatively simple. In contrast to this the immediate observation of the mass velocity is impossible in most of the cases. The authors worked out 2 methods for the complex determination of the kinematic parameters of the wave, namely the "method of repelling" and the

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"method of slowing down". In the method of repelling the propagation of a strong crack is investigated, which forms on the occasion of the reflection of a detonation wave at an elastic obstacle. The experimentally measurable quantities on this occasion are the wave velocity D and the velocity W of the displacement of the free surface of the obstacle on the initial part of the trajectory. W is approximately equal to the double mass velocity of the substance behind the wave front. The velocity of motion W is obtained by the material of the obstacle under the action of two different processes, namely of the shock-like transition from the state $P_o = 0; v_o$ into the state $P_1; v_1$, and of the subsequent isentropic expansion in the oncoming relief wave. The second paragraph deals with the method of the investigation and with the experimental technique. The third paragraph reports on the dynamic adiabatic line of the iron. A table gives the parameters of all experimentally stated figurative points of the adiabatic curve of the shock in iron. Within the whole investigated domain of the mass velocities

The Dynamic Compressibility and the Equation of State 56-34-4-14/60
of Iron at High Pressures

from U = 1,0 to U = 5,17 km/sec the linear relationship $D = 3,80 + 1,58\ U$ is valid for the propagation velocity D of the shock wave. In the next paragraph the compression of iron at the temperature zero is computed and in the last paragraph the curve of the compressibility of iron is extrapolated to the domain of relatively low degrees of compression. The developed method allows to fix the dynamic adiabatic curve of iron with different initial density within the interval of pressures of from $4 \cdot 10^5$ to $5 \cdot 10^6$ atmospheres. The dynamic adiabatic curve of porous iron with decreased initial density is in the diagram pressure - density considerably higher than the adiabatic of the compact material which speaks for the great influence of the thermic component in the shock-like compression. The authors derived an empirical equation of state of iron and ascertained the course of the curve of the cold compressibility unto the densities $\rho = 1,7\rho_0$. This work was carried out on the initiative by Ya.B.Zel'dovich. The authors also mention the cooperation of a number of other authors.

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The Dynamic Compressibility and the Equation of State of Iron at High Pressures 56-34-4-14/60

There are 10 figures, 3 tables, and 14 references, 6 of which are Soviet.

SUBMITTED: December 28, 1957

1. Iron--Mechanical properties

Card 4/4

56-34-4-15/60

AUTHORS: Al'tshuler, L. V., Krupnikov, K. K., Brazhnik, M. I.

TITLE: The Dynamic Compressibility of Metals Under Pressures of From 400 000 to 4 Million Atmospheres (Dinamicheskaya szhimayemost' metallov pri davleniyakh ot chetyrekhsot tysyach do chetyrekh millionov atmosfer)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol. 34, Nr 4, pp. 886 - 893 (USSR)

ABSTRACT: This paper reports on the bases of a method for the experimental determination of the dynamic compressibility of copper, zinc, cadmium, tin, silver, gold, lead, and bismuth at pressures of from 400 000 to 4 000 000 atmospheres. In the case of all these materials the knowledge of only one dynamic adiabatic curve is not sufficient for the determination of the equations of state, which establish a relation between the pressure and the temperature and density. Yet the data on the shock-like compressibility at pressures of hundred thousands and millions of atmospheres are very valuable for the verification of the theoretical

Card 1/3

ideas on the behaviour of matter on such conditions. The authors investigate the transition of a shock wave with known amplitude from the medium A into the substance B. The experimental method is discussed in detail. A plane shock wave caused by an explosion passed an iron shield to which samples of iron and of the materials to be investigated were pressed. The 3 series of experiments differ in the pressure of the shock wave in the shield. The propagation velocities of the shock wave obtained in these experiments are composed in a table. There are also given the parameters of the shock waves in the iron shields and the initial densities ϱ_0 of the investigated samples. In all investigated metals, with the exception of tin, the dependence of the displacement velocity D of the wave front in the undisturbed medium on the velocity U of matter behind the wave front for $U > 1$ km/sec is sufficiently exactly approximated by linear relationships of the kind $D = C_0' + \lambda U$. The degree of compression in a certain way depends on the initial atom volume. In the case of increasing pressures the wave velocity and the mean modulus of the shock-

The Dynamic Compressibility of Metals Under Pressures of From 400 000 to 4 Million Atmospheres

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-like compression increase for many times. The authors thank A.N.Kolesnikova, S.N.Pokrovskiy, A.L.Zhiryakov, M.M.Pavlovskiy and V.P.Drakin for their cooperation in this work. There are 5 figures, 5 tables and 3 references, 2 of which are Soviet.

SUBMITTED: December 28, 1957

1. Metals--Mechanical properties

Card 3/3

83715

S/056/60/038/004/008/048
B019/B070

1.1210

24.4100

AUTHORS: Al'tshuler, L. V., Kormer, S. B., Brazhnik, M. I., Vladimirov, L. A., Speranskaya, M. P., Funtikov, A. I.

TITLE: The Isoentropic Compressibility of Aluminum, Copper, Lead, and Iron at High Pressures

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 38, No. 4, pp. 1061-1073

TEXT: New methods of investigation of the properties of materials at high pressures depend on the application of shock waves. Two parameters are determined: the velocity of propagation of the shock waves, and the particle velocity at the front, which enable the pressure and the density of the shock compression to be determined. Another important kinematic parameter is the velocity of sound in the shock compressed material. This quantity characterizes the velocity of propagation of small disturbances in the compressed material. These small disturbances are weak shock waves and discharge waves, and are of importance in geophysical and other similar investigations. In the present paper, a method is suggested for

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The Isoentropic Compressibility of Aluminum, Copper, Lead, and Iron at High Pressures

S/056/60/038/004/008/048
B019/B070

the measurement of the velocity of sound in the front of strong shock waves, and results of investigations for aluminum, lead, and iron for the pressures between $4\cdot10^5$ and $3.5\cdot10^6$ atm are given. In the first section a method of measuring the velocity of sound is given which depends on measurement with the discharge waves. In this method the decrease of pressure due to the superposition of the discharge and dilatation waves in the zone of the boundary of the sample in the form of a stepwise built cylinder is measured photochronographically. In the second section, elastic and plastic discharge waves are discussed. In the third part, a method of measurement is discussed in which the collision of a plate and a sample from a material of known dynamic adiabatics is studied. This method leads to an experimental determination of the trajectories of the shock waves, and to the measurement of the particle velocities at one or more points of these trajectories. In the fourth part, the data given in Tables 2, 3, 4, and 5 are discussed in detail. In the last two sections, the isoentropic compressibility of the metals, and the upper limit of "cold" compression are studied on the basis of the results obtained here; and an estimate of the thermal energy and the temperature is made. In the present paper, the existence of two sound velocities corresponding to the

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The Isoentropic Compressibility of Aluminum, Copper, Lead, and Iron at High Pressures

S/056/60/038/004/008/048
B019/B070

elastic and plastic states of matter are established. The velocities of sound, and the isoentropic compressibilities in the above mentioned pressure range, the estimates of thermal energies; the temperature of shock compression; and the Grüneisen coefficients are given in tables. Yu. M. Shustov is mentioned. The paper was started in 1948 on the initiative of Academician Ya. B. Zel'dovich. The Corresponding Member of the AS USSR Ye. I. Zababakhin is thanked for many valuable advices. K. K. Krupnikov, B. N. Ledenev, and A. A. Bakanova are thanked for discussions. Professor V. A. Tsukerman and his colleagues I. Sh. Model' and M. A. Kanunov helped in the constructional problems. Some data were obtained from V. I. Borodulin. N. S. Tenigin, A. N. Kolesnikova, L. N. Gorelova, and M. S. Shvetsov helped in the experimental work. There are 10 figures, 7 tables, and 8 references: 5 Soviet and 3 US.

SUBMITTED: October 7, 1959 (initially), January 3, 1960 (after revision)

Card 3/3

S/056/62/042/003/006/049
B104/B102

18.8100 26.2312 18.1152

AUTHORS: Krupnikov, K. K., Brazhnik, M. I., Krupnikova, V. P.

TITLE: Shock compression of porous tungsten

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 3, 1962, 675 - 685

TEXT: The wave velocity D and the mass velocity U of a shock compression in tungsten of different porosities were determined by a method introduced by L. V. Al'tshuler et al. (ZhETF, 34, 886, 1958). Shock waves of given intensities were transmitted to tungsten samples by means of metals whose dynamic compressibility was known. Three test series (Table 1) were made. The shock adiabats, $P(\sigma)$, for porous samples showed a negative slope at pressures $< 0.5 \cdot 10^6$ atm. With increasing shock wave amplitude, the negative slope decreased and became positive. This peculiar course of the adiabat was explained by the variation of the effective Grüneisen coefficient with the degree of compression and heating. An essential contribution is made by the increase in electronic heat capacity. The slope $(d\varrho/d\sigma)_H$ and γ were calculated (Table 3). √

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Shock compression of porous tungsten

S/056/62/042/003/006/049
B104/B102

A. S. Kompaneyets and S. P. D'yakov are mentioned. L. V. Al'tshuler, Ya. B. Zel'dovich, Ye. I. Zababakhin are thanked for interest, S. N. Pokrovskiy, A. N. Kolesnikova, A. A. Zhiryakov, A. V. Blinov, and T. T. Lisovitskaya for assistance. There are 6 figures, 4 tables, and 11 references: 8 Soviet and 3 non-Soviet. The three references to English-language publications read as follows: R. G. McQueen, S. P. Marsh. J. Appl. Phys., 31, 1253, 1960; R. Latter, Phys. Rev., 99, 1854, 1955; T. R. Waite, R. S. Craig, W. E. Wallace, Phys. Rev., 104, 1240, 1956.

SUBMITTED: November 1, 1961

Table.1. Experimental results.

Legend: (1) Test series, (2) material transmitting the shock waves to the tungsten, and P_3 in dynes/cm^2, the pressure exerted by the shock wave; (3) degree of porosity, $m = \varrho_0/\varrho_{00}$, where ϱ_0 = density of compact tungsten, ϱ_{00} = density of porous tungsten, (4) D and U, km/sec, (5) pressure 10^{-12} P, dynes /cm^2, (6) relative density, $\sigma = \varrho/\varrho_0$.

Card 2/3

BRAZHNIK, M.I

AID Nr. 971-19 20 May

IMPACT COMPRESSIBILITY OF Ti, Mo, Ta, and Fe (USSR)

Krupnikov, K. K., A. A. Bakanova, M. I. Brazhnik, and R. F. Trunin. IN: Akademiya nauk SSSR. Doklady, v. 148, no. 6, 21 Feb 1963, 1302-1305.
S/020/63/148/006/012/023

The impact compressibility of Ti, Mo, and Ta at pressures up to $5 \cdot 10^6$ atm, and of Fe at a pressure of $\sim 9 \cdot 10^6$ atm, has been determined. The pressure was generated by shooting aluminum plates at a velocity of 5600 m/sec or steel pins at a velocity of 8640 or 9100 m/sec onto test specimens 3-4 mm thick which were shielded by an Al or Fe shield. The pressure and the degree of compression were calculated from the experimentally determined velocity D of the shock wave. The state of impact compression and the values of pressure P and mass velocity behind the front of shock wave U were determined graphically. The compression density ρ was calculated from the equation $\rho_0 D = \rho(D-U)$, where ρ_0 is the initial density. From the obtained shock-wave parameters the adiabatic curves for shock waves and zero isotherms were calculated and plotted.
[MS]

Card 1/1

BRAZHNIK, M.Ya.

Hydrochloric acid substitute in field determination of minerals.
Razved. i okh. nedr 27 no.8:50-51 Ag '61. (MIRA 16:7)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Mineralogy, Determinative)

BRAZHNIK, P.A.

Predecessors of perennial grasses
Sov. agron., 10, no.9, 1952

BRAZHNIK, P.A., kand.sek'skokhoz.nauk; GLYANTSEV, A.F., kand.sel'skokhoz. nauk

Methods of sowing perennial grasses. Nauch. trudy Ukr. nauch.-issl. inst. rast. sel. i gen. 2:23-56 '58. (MIRA 14:1)
(Grasses) (Legumes)

BRAZHNIK, P.A., kand.sel'skokhoz.nauk

Methods of growing perennial grasses for seed. Nauch. trudy Ukr. nauch.-issl. inst. rast. sel. i gen. 2:65-82 '58. (MIRA 14:1)
(Legumes) (Grasses)

BRAZHNIK, P.A., kand.sel'skokhoz.nauk

Harrowing forage alfalfa fields in spring and after mowing. Nauch. trudy Urk. nauch.-issl. inst. rast. sel. i gen. 2:83-84 '58. (MIRA 14:1)

(Alfalfa) (Tillage)

BRAZHNIK, P.A., kand.sel'skokhoz.nauk

Fertilizer application to perennial grasses. Nauch. trudy Ukr. nauch.-issl. inst. rast. sel. i gen. 2:85-90 '58. (MIRA 14:1)
(Grasses--Fertilizers and manures)
(Legumes--Fertilizers and manures)

BRAZHNIK, P.A., kand.sel'skokhoz.nauk

Fertilizer requirement of spring and winter wheat when preceded by perennial grasses. Nauch. trudy Ukr. nauch.-issl. inst. rast. sel. i gen. 2:267-270 '58. (MIRA 14:1)
(Wheat--Fertilizers and manures)

BRAZHNIK, P.A., kand.sel'skokhoz.nauk

Measures for the fall care of strongly developed winter wheat.
Nauch. trudy Ukr. nauch.-issl. inst. rast. sel. i gen. 2:271-275
'58. (MIRA 14:1)
(Wheat)

BRAZHNIK, P.A., kand.sel'skokhoz.nauk

Effect of snow retention and soil moisture accumulation on crop yields. Nauch. trudy Ukr. nauch.-issl. inst. rast. sel. i gen. 2:229-234 '58. (MIRA 14:1)
(Soil moisture) (Snow) (Field crops)

BRAZHNIK, P.A., kand.sel'skokhoz.nauk

How the time chosen for turning the perennial grass sod affects the yeild of crops in the rotation. Nauch. trudy Urk. nauch.-issl. inst. rast. sel. i gen. 2:287-291 '58. (MIRA 14:1)
(Tillage) (Grasses) (Field crops)

BRAZHNIK, Viktoriya Ivanovna; MIKELADZE, Pavel Vyacheslavovich; FOMICHEV, Vasiliy Ivanovich; USPENSKIY, V.V., kand. ekon. nauk, nauchnyy red.; MORSKOY, K.L., red.; MIKHEYEVA, A.A., tekhn. red.

[Planning and financing capital construction; practice of the Dnepropetrovsk Economic Council] Planirovanie i finansirovanie kapital'nogo stroitel'stva; opyt Dnepropetrovskogo sovnarkhoza. Moskva, Gosstroiizdat, 1963. 76 p. (MIRA 16:8)

(Dnepropetrovsk Province--Construction industry--Finance)

BRAZHNIK, V.M.

Boxes for laboratory studies in biology. Est. v shkole no.6: 70-71 N-D '56. (MLRA 9:12)

1. Uchitel' sredney shkoly no.1 goroda Orska Chkalovskoy oblasti.
(Biology--Study and teaching)

BRAZHNIK, V.M., uchitel'.

Establishing norms for the work of students on the school experiment plot. Biol. v shkole no.2:46-47 Mr-Ap '58. (MIRA 11:4)

1. Shkola No.1, g. Orsk Orenburgskoy oblasti.
(Agriculture--Study and teaching)

BRAZHNIK, V.M.

Built by skilful collective farmers. Sel'. stroi. 12 no.2:12-13 F '58.
(MIRA 11:2)

1. Starshiy inzhener Omskogo oblastnogo upravleniya po stroitel'stvu v kolkhozakh.

(Moskalenki District--Farm buildings)

BRAZHNIK, V.M., uchitel'

Biologic competition. Biol. v shkole no.3:86-87 My-Je '61.
(MIRA 14:7)

1. Odinnadtsatiletnyaya shkola No.1 imeni A.S.Makarenko g. Orska Orenburgskoy oblasti.
(Biology--Study and teaching)

BRAZHNIK, V.S.; YABLONSKAYA, L.V., redaktor; DOKUKINA, Ye.V., redaktor; EVENSON, I.M., tekhnicheskiy redaktor

[Experience in making machine parts at the Krivoi Rog and Novo-Tagil plants] Opyt izgotovleniia detalei oborudovaniia na Krivorozhskom i Novo-Tagil'skom metallurgicheskikh zavodakh. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1955. 76 p. (MLRA 8:7)

(Krivoi Rog--Machine-shop practice)

AUTHOR: Brazhnik, V.S. SOV/130-58-9-8/23

TITLE: Pneumatic Drive for Returning a Mixer When the Load is Removed (Pnevmaticheskiy privod dlya vozvrashcheniya miksera pri snyatii napryazheniya)

PERIODICAL: Metallurg, 1958, Nr 9, pp 19 - 20 (USSR)

ABSTRACT: Though mixers normally return by gravity to their position when the tilting load is removed, lining wear and other factors sometimes prevent this. A special, pneumatic-mechanical (Figures 1 and 2) system has been installed on the 1 300-ton mixer at the Krivorozhiy metallurgicheskiy zavod (Krivoy Rog Metallurgical Works) for providing a positive drive to return the mixer. The pneumtic-cylinder diameter is 150 and its stroke 110 mm, the working pressure being 4-6 atm. and the shaft torque 185 kgm. The positive return drive secures safety of mixer operation in the event of failure of the main drive, is relatively cheap to make and is recommended by the author for use at other works.
There are 2 figures.

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SOV/130-58-9-8/23

Pneumatic Drive for Returning a Mixer When the Load is Removed.

ASSOCIATION: Zavod "Krivorozhstal'" ("Krivorozhstal'" Works)

1. Concrete mixers--Operation 2. Concrete mixers--Control systems 3. Control systems--Equipment

Card 2/2

PELEYEV, Aleksandr Ivanovich; ROBER, David Aronovich; BRAZHNIKOV, Aleksandr Mikhaylovich; VIGDORCHIK, D.Ya., retsenzent; IZATULOV, R.A., retsenzent; TSIPERSON, A.L., red.

[Gas-using equipment of meat industry enterprises] Gazoispol'zuiushchee oborudovanie predpriiatii miasnoi promyshlennosti. Moskva, Pishchevaia promyshlennost', 1965. 155 p. (MIRA 18:10)

BRAZHNIKOV, G.A.

"Structures without roots" of the Stalingrad type. Geol.nefti i gaza 3 no.10:21-24 O '59. (MIRA 12:12)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya Upravleniya Stalingradneftegaz.
(Don Valley--Geology, Structural)

BRAZHNIKOV, G.A.

Forms of tectonic disturbances in Stalingrad Province and their genesis. Biul. MOIP. Otd. geol. 34 no.5:149-150 S-O '59. (MIRA 14:6)

(Stalingrad Province—Geology, Structural)

BRAZHNIKOV, G.A.; VESNINA, T.L.

Prospecting methods and oil pools in Volgograd Province. Sov.geol. 5 no.2:122-126 F '62. (MIRA 15:2)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

(Vogograd Province—Petroleum geology)
(Volgorod Province—Gas, Natural—Geology)

MARKOVSKIY, N.I.; BRAZHNIKOV, G.A.; VESNINA, T.L.

Prospecting for lithological oil and gas pools in the Volga Valley protion of Volgograd Province. Geol.nefti i gaza 6 no.4:25-29 Ap '62. (MIRA 15:4)

1. Moskovskiy gosudarstvennyy universitet i Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

(Volgograd Province—Petroleum geology)
(Volgograd Province—Gas, Natural—Geology)

BRAZHNIKOV, M.

[redacted] Operation of a horizontal kettle without a barometric condenser. Mias.ind.SSSR 28 no.1:55-56 '57. (MLRA 10:3)

1. Glavnyy inzhener Rosmyasomolstroymontazha. (Kettles)

KOTROVSKIY, M.M.; KOPELEV, D.D.; BRAZHNIKOV, M.A.

Automation of the exhaust section of a sintering plant. Met. i gornorud. prom. no.2:72-73 Mr-Ap '65. (MIRA 18:5)

BRAZHNIKOV, M.G.; LOMAKINA, N.N.; GUSEVA, V.G.; KUDRINA, Ye. S.

Recovery, purification, and characteristics of actinomycins formed by various cultures of Actinomyces antagonists [with cummary in French, p.62]Antibiotiki 1 no.4:3-5 Jl-Ag '56. (MLRA 9:11)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
    (ACTINOMYCES, cult.
        prod. of new actinomycines, secretion, purification & characteristics)
    (ANTIBIOTICS
        actinomycines, first prod. from four strains of actinomyces, secretion, purification & characteristics)

SOV/136-58-12-14/22

AUTHORS: Brazhnikov, N.I. and Krym, I.A.

TITLE: Ultrasonic Flaw Detection of Pressing Defects in Pressed Bar-billets for Tubes (Ul'trazvukovaya defektoskopiya pressutyazhiny v pressovannykh prutkakh-zagotovkakh dlya trub)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 12, pp 67 - 69 (USSR)

ABSTRACT: Two methods are in use for pressing-defect detection in non-ferrous metal tube billets. In one visual inspection of billet ends is carried out without etching; in the other after etching in concentrated nitric acid. The first is often ineffective; the second is wasteful of effort and materials. The authors describe the construction and testing of an ultrasonic flaw-detector, type UZD-37, designed by KB Tsvetmetavtomatika (Ref 2) fitted with a special combined finder for emitting and subsequent receiving of the reflected ultrasonic vibrations (Figure 1). The generator produces ultrasonic frequencies from electrical oscillations of 2.5 (or 1.2) x 10^6 Hertz frequency with the aid of a barium titanate plate (which also performs the reverse conversion for the reflected ultrasonic waves). Figures 2 shows the flaw-detector in

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SOV/136-58-12-14/22

Ultrasonic Flaw Detection of Pressing Defects in Pressed Bar-billets for Tubes

position on the billet-testing stand. The installation was tested at the "Krasnyy Vyborzhets" Works on L68, LO70 and MKh30 alloys and detected the end of the main end flaws reliably, though it sometimes failed to detect small flaws and was hampered by coarse granular structure. Following these tests, the installation successfully underwent service trials and was adopted.
There are 2 figures and 3 Soviet references.

ASSOCIATIONS: KB Tsvetmetavtomatika and Zavod "Krasnyy Vyborzhets" ("Krasnyy Vyborzhets" Works)

Card 2/2

L 20082-65 EPR/EWA(h)/EWT(1)/EWA(m)-2 Ps-4/Peb WW/MLK

ACCESSION NR AM4049796 BOOK EXPLOITATION S/

Birger, Gerts Izrailevich; Brazhnikov, Nikolay Ivanovich

B+/

Ultrasonic flowmeters (Ul'trazvukovy'ye raskhodomery'), Moscow, Izd-vo "Metallurgiya", 1964, 382 p. illus., biblio., tables. Errata slip inserted. 3,680 copies printed.

TOPIC TAGS: ultrasonic flowmeter 10 25

PURPOSE AND COVERAGE: This monograph is devoted to problems in the theory and practice of developing ultrasonic flowmeters for use in measuring the flow of aggressive, contaminated and crystallizing liquids and pulp. It covers the theoretical principles and the engineering calculations of various ultrasonic flowmeters, describes the flowmeters, indicates possible areas for their use, and points out the features of their assembly, tuning, and use. Special attention is given to an investigation of acoustical contactless measuring converters which make it possible to use ultrasonic flowmeters under production conditions. The book is intended for engineers, technicians, and students specializing in the design, fabrication, and use of ultrasonic flowmeters and other ultrasonic inspection-measuring equipment. It can be useful to technologists and designers concerned with the measurement of

gm

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the flow of liquids under production conditions.

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Ch. XX. Two-channel ultrasonic flowmeters -- 283
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Ch. XXII. Setting up and using ultrasonic flowmeters -- 325
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SUB CODE: EE, IE SUBMITTED: 26May64 NR REF SOV: 048

OTHER: 107

Card 3/3

SOV/137-59-12-27806

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 12, p 293 (USSR)

AUTHORS: Birger, G.I., Brazhnikov, N.I.

TITLE: Determination of Boundaries of Pressure Shrinkage Holes in Brass and Bronze Rods by the Method of Ultrasonic Flaw Detection

14

PERIODICAL: Sb. materialov po avtomatiz. proizv. protsessov i dispetcherizatsii, Nr 3, Moscow, 1958, pp 68 - 83

ABSTRACT: Information is given on results of studies carried out to determine the boundaries of pressure shrinkage-holes with the use of ultrasonic waves. The possibility was establihed of using for this purpose (for rods of ≤ 70 mm in diameter) the "UZD-37"-device. 28 The ultrasonic control diminishes the number of breaks in testing the rods and reduces metal loss. For a number of alloys ultrasonic control is the only method to determine precisely the boundaries of a deficient area in the rod. The author analyzes in detail characteristics and variety of defects in pressed rods.

Ya.O.

Card 1/1

S/046/63/009/001/001/026
B104/B186

AUTHORS: Birger, G. I., Brazhnikov, N. I.

TITLE: Temperature errors and the calculation of some parameters of ultrasonic flowmeters

PERIODICAL: Akusticheskiy zhurnal, v. 9, no. 1, 1963, 5-9

TEXT: In two-channel ultrasonic flowmeters the main temperature error is caused by simultaneous temperature variations both of the controlled medium and of the acoustic line material; in single-channel flowmeters the main error is caused by a similar effect. Another temperature error arises in the asymmetric electronic systems. In flowmeters of the two-channel phase circuit type with refraction the main temperature error is determined by

$$|\delta\varphi_{t_0}| = \frac{b_1 + b_2(1 - 2n_0^2 \sin^2 \alpha)}{1 - n_0^2 \sin^2 \alpha} \Delta\varphi\delta t, \qquad (1),$$

where b_1 and b_2 are the relative temperature coefficients of the ultrasonic

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velocities in the acoustic line material and in the controlled medium; $n_0 = c_{20}/c_{10}$ is the index of refraction of the ultrasonic waves on the boundary material - controlled medium; α is the angle between the acoustic line axis and the normal to the tube axis; $\Delta\varphi$ is the phase shift of the ultrasonic vibrations; δt is the temperature variation of the controlled liquid. By selecting a material for the acoustic line with proper c_{10} and b_1 the main temperature error could be kept small. An automatic compensation of the main temperature error is achieved by the condition

$$\sin\alpha = \frac{1}{n_0}\sqrt{\frac{b_1 + b_2}{2b_2}} \qquad (3).$$

Therefore, if $b_1 < 0$ an automatic compensation of the main temperature error may be obtained for most of the liquids with $b_2 < 0$. Finally the design of pickups with temperature compensation at $b_1 > 0$ is discussed. There are 3 figures and 1 table.

ASSOCIATION: Konstruktorskoye byuro "Tsvetmetavtomatika", Moskva (Design Office "Tsvetmetavtomatika", Moscow)

SUBMITTED: October 13, 1961

Card 2/2

BIRGER, Gerts Izrailevich; BRAZHNIKOV, Nikolay Ivanovich

[Ultrasonic flowmeters] Ul'trazvukovye raskhodomery. Moskva, Metallurgiia, 1964. 382 p. (MIRA 17:9)

L 01995-67 EWT(1)/EWT(m)/T/EWP(t)/ETI/EWF(k) JD

ACC NR: AM6023682 Monograph UR 45 44. BH

Brazhnikov, Nikolay Ivanovich

Supersonic methods (Ul'trazvukovyye metody) Moscow, Izd-vo "Energiya", 65. 0247 p. Illus., biblio. 6,000 copies printed Series note: Fizicheskiye i fizikokhimicheskiye metody kontrolya sostava i svoystv veshchestva

TOPIC TAGS: ultrasound, ultrasonic property, ultrasonic equipment, ultrasonic vibration, ultrasonic wave, ultrasound absorption, supersonic vibration

PURPOSE AND COVERAGE: This book contains basic information on ultrasound, 21 on the methods for its generation and receipt, and on its generators and receivers. The dependence of the propagation and attenuation of ultrasound on physico-chemical parameters of solid and liquid media is analyzed. The methods for measuring the velocity of propagation and of attenuation, and the converters used in measuring operations are discussed. Electronic measuring circuits are shown, and the stability of their performance is analyzed. Plans and construction of the laboratory and industrial experimentation are described.

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UDC: 621.034.4-8

L 01995-67

ACC NR: AM6023682

Ch. Two. Methods for measuring the velocity of propagation and attenuation of ultrasound - - 94
Ch. Three. Electronic circuits for ultrasound instruments - - 141
Ch. Four. Acoustical converters - - 170
Ch. Five. Ultrasound instruments for investigating and controlling physico-chemical properties of matter - - 203
Bibliography - - 225

SUB CODE: 13, 20/ SUBM DATE: 21Oct65/ ORIG REF: 203/ OTH REF: 226

Card 2/2

L 22494-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)

ACC NR: AP6014457

SOURCE CODE: UR/0115/65/000/010/0026/0031

AUTHOR: Brazhnikov, N. I.

ORG: none

58
B

TITLE: Acoustic transducers for non-contact measurement in ultrasonic flowmeters 14

SOURCE: Izmeritel'naya tekhnika, no. 10, 1965, 26-31

TOPIC TAGS: ultrasonic equipment, flow meter, acoustic transducer, ultrasonic wave

ABSTRACT: The author divides acoustic non-contact measurement transducers 14 (pickups) for ultrasonic flowmeters into four classes according to the number of refracting surfaces through which the ultrasonic wave passes between the radiation source and the liquid being studied. The propagation of the ultrasonic waves and the equations for the flowmeters are examined for pickups with one, two, three and four refracting surfaces. Simplified equations are given in each case for PM and prr-modulated circuits. These equations are generalized to a transducer with n refracting surfaces. Recommendations are given for design modification. Orig. art. has: 4 figures, 25 formulas, and 1 table. [JPRS]

SUB CODE: 09, 20 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 001

Card 1/1 BK

BRAZHNIKOV, N.N.

Differential X-ray diagnosis of malignant and benign breast tumors.
Vest. rent. i rad. 36 no.6:45-47 N-D '61. (MIRA 15:2)

1. Iz kafedry rentgenologii i radiologii (zav. - prof. L.D.Lindenbraten)
I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova
(dir. - prof. V.V.Kovanov).
(BREAST—TUMORS) (DIAGNOSIS, RADIOSCOPIC)

BRAZHNIKOV, N.N.

Significance of X-rays in the differential diagnosis of breast cancer. Vop.onk. 7 no.11:56-60 '61. (MIRA 15:5)

1. Iz kafedry rentgenologii i radiologii (zav. - prof. L.D. Lindenbraten) 1-go Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova (dir. - prof. V.V. Kovanov).
(BREAST--CANCER)

BRAZHNIKOV, N.N.; LINDENBRATEN, L.D.; PRIYEV, I.G.

Dynamics of the roentgen picture of breast cancer during radiotherapy. Med. rad. 8 no.3:10-15 Mr '63. (MIRA 17:9)

1. Iz kafedry rentgenologii i radiologii (zav. - prof. L.D.Lindenbraten) I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

BRAZHNIKOV, N.N. (Moskva, V-333, Leninskiy prospekt, 60/2, korp. 8, kv.49)

Involutional changes of the breast in the X-ray picture. Vop. onk. 10 no.3:82-85 '64. (MIRA 17:8)

1. Iz kafedry rentgenologii i radiologii 1-go Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova (zav. kafedroy - prof. L.D. Lindenbraten) i rentgenologicheskogo otdeleniya Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta akusherstva i ginekologii (zav. otdeleniyem - kand. med. nauk - P.N. Demidkin).

BRAZHNIKOV, N.N. (Moskva)

Method for simple roentgenography of the breasts. Med.sestra 21 no.7:42-44 Jl '62. (MIRA 15:8)

(BREAST--RADIOGRAPHY)

BRAZHNIKOV, Nikolay Nikitovich; LINDENBRATEN, Leonid Davidovich, prof.; BENTSIANOVA, V.M., red.

[X-ray and radioisotope diagnosis of diseases of the breast] Rentgenovskaia i radioizotopnaia diagnostika zabolevanii molochnykh zhelez. Moskva, Meditsina, 1965. 182 p.
(MIRA 18:12)

BRAZHNIKOV, N.P.; KULIKOV, A.S.

Filter for cleaning air entering the vacuum system of a belt press.
Rats. i izobr.predl.v stroi. no.118:46-47 '55. (MLRA 9:7)
(Brickmaking machinery)

BRAZHNIKOV, N. V.

"Investigation of a System of Controlling the Main Driving Gear of a Reversing Rolling Mill with EMU." Cand Tech Sci, Ural Polytechnic Inst imeni S. M. Kirov, Min Higher Education USSR, Sverdlovsk 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

BRAZHNIKOV, N.V.; PERMINOV, L.D.; TROITSKIY, K.P.; KEYKHEL', R.P.

Improving the technology of hardening rail ends with high frequency currents. Prom.energ. 12 no.6:14-15 Je '57. (MLRA 10:7)
(Railroads--Rails)

SOV/123-59-15-59363

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 15, p 72 (USSR)

AUTHORS: Brazhnikov, N.V., Gubert, S.V., Bondarenko, V.I.

TITLE: Automation Experience of a Rail-Structural Mill

PERIODICAL: Sb. statey. Ural'skiy z-d tyazh. mashinostr. im. S. Ordzhonikidze, 1958, Nr 1, pp 185 - 204

ABSTRACT: The experience of automating the milling machines for the finishing of rails, the mechanisms of the sawing section of the branding machine, the tables in front of the 800 planishing stand and the main drive of this stand as well as the tables, transporting the cold rails from the isothermic soaking pits to the central cooler of the rail mill 800, was examined. Besides, the operation of the fixing device of the cogging mill 900 was automated.

M.G.N.

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BRAZHNIKOV, N.V.; BONDARENKO, V.I.; CHISTOV, V.P.; GEKTINA, R.F., inzh., red.;
KUTENKOVA, G.M., tekhn.red.

[Automatic control of rail and girder rolling mills at the Nizhniy Tagil Metallurgical Combine] Avtomatizatsiia rel'so-balochnogo stana Nizhne-Tagil'skogo metallurgicheskogo kombinata. Sverdlovsk, TSentr.biuro tekhn.informatsii, 1959. 46 p.
(MIRA 14:4)

1. Russia (1917- R.S.F.S.R.) Sverdlovskiy ekonomicheskiy administrativnyy rayon. Sovet narodnogo khozyaystva.
(Nizhniy Tagil--Rolling mills) (Automatic control)

PHASE I BOOK EXPLOITATION SOV/4542

Brazhnikov, Nikolay Vasil'yevich, and Il'ya Savel'yevich Rapoport

Montazh, ekspluatatsiya i remont elektricheskogo oborudovaniya metallurgicheskikh zavodov (Installation, Operation, and Maintenance of Electrical Equipment in Metallurgical Plants) Sverdlovsk, Metallurgizdat, Sverdlovskoye otd-niye, 1960. 335 p. Errata slip inserted. 7,200 copies printed.

Ed.: L. P. Rozhko; Ed. of Publishing House: M. M. Syrchina; Tech. Ed.: R. M. Matlyuk.

PURPOSE: This book is a textbook for day or evening students in industrial and metallurgical tekhnikums who are taking a course on the installation, maintenance, and operation of electrical equipment in industrial establishments and plants.

COVERAGE: The book sets forth basic information on the operation, maintenance, and installation of electrical equipment in the shops, substations, and electric networks of metallurgical plants. The authors thank Engineers O. I. Barats, G. N. Savanin, and L. P. Rozhko for their help. There are 36 references, all Soviet.

Card 1/9

BRAZHNIKOV, N.V., kand.tekhn.nauk

Introduction of new equipment at the Nizhniy Tagil Metallurgical processes. Mekh.i avtom.proizv. 14 no.9:5-6 S '60.
(MIRA 13:9)
(Nizhniy Tagil--Steelworks--Technological innovations)

BRAZHNIKOV, N.V., kand.tekhn.nauk; BONDARENKO, V.I., inzh.; OSADCHIY, N.I., inzh.; KHRIPKO, Yu.I., inzh.; CHISTOV, V.P., inzh.

Automatic-control system for scale cars. Mekh.i avtom.proizv. 14 no.10:23-26 O '60. (MIRA 13:10)
(Weighing machines) (Automatic control)

BRAZHNIKOV, ~~Nikolay Vasil'yevich~~; BONDARENKO, Vladimir Ivanovich; CHISTOV, Villen Petrovich; DRALYUK, B.N., retsenzent; SMOL'NIKOV, L.P., red.; BUR'KOV, M.M., red. izd-va; KOROL', V.P., tekhn. red.

[Automatic control of blast furnace and rolling mill processes with use of digital computers]Avtomatizatsiia domennogo i prokatnogo proizvodstva s primeneniem tsifrovykh schetno-reshaiushchikh ustroistv. Sverdlovsk, Metallurgizdat, 1962. 256 p. (MIRA 15:12)

(Blast furnaces) (Rolling mills)
(Electronic digital computers)

KIZIN, M.G., kand. tekhn. nauk; BRAZHNIKOV, N.V., inzh.;
LYAMIN, P.Ye., inzh.

Adjustment of ash collector batteries. Elek. sta. 35 no.5:17-19
My '64. (MIRA 17:8)

BRAZHNIKOV, Nikolay Vasil'yevich; RAPOPORT, Il'ya Savel'yevna;
LOPATINA, G.G., red.

[Assembly, operation and repair of electric equipment in metallurgical plants] Montazh, ekspluatatsiia i remont elektricheskogo oborudovaniia metallurgicheskikh zavodov. Moskva, Metallurgiia, 1965. 350 p. (MIRA 18:12)

Brazhnikov, P.G.

BRAZHNIKOV, P.G.

Promotion of inventions and efficiency at the Leningrad Liqueur and Vodka Plant. Spirt.prom. 23 no.7:47 '57. (MIRA 11:1)
(Leningrad--Liquor industry)

BRAZHNIKOV, P.G.

RT-1202 (Evaluating the occupational usefulness of skin grafts on hands and fingers)
Professional'naia tsennost' kozhi, peresazhennoi na kist' i pal'tsy.
KHIRURGIIA, 18(8): 26-29, 1948.

BRAZHNIKOV, P. G., Cand of Med Sci -- (diss) "Peculiarities of sutured wounds of the stomach during acute radiation sickness (experimental research)." Kuybyshev, 1957, 14 pp, (Kuybyshev State Medical Institute, Chair of Operative Surgery), 200 copies (KL, 29-57, 93)

AZRIYELOVI, S.S.; STEPANOV, I.A.; BRAZHNIKOV, P.G.

Employees of the Leningrad Liqueur and Vodka Plant are greeting the 21st Congress of the CPSU with new achievements. Spirt.prom. 25 no.1:11-12 '59. (MIRA 12:2)
(Leningrad--Distilling industries--Equipment and supplies)

Frame filter press. A. F. Sorochenko, M. Ya. Meshengisser, G. M. Kochkin, P. L. Brazhnikov, and V. P. Kulik. U.S.S.R. 104,156, Nov. 25, 1956. M. H.

5

BRAZHNIKOV, P.L.

Box filter press. A. F. Sorochenko, M. Ya. Meshengisser, G. M. Kochkin, P. L. Brazhnikov, and V. P. Kulik. U.S.S.R. 104,214, Feb. 25, 1957. The filter press comprises an upper box where the suspension is stored and a lower chamber where suction is applied and the filtrate drawn off. Between these two moves a belt filter. Several such units are arranged one on top of the other and the belt zigzags through them. M. Hosch

KRIPAK, N.; KEL'MAN, I.; BRAZHNIKOV, V.

Our experience in modernizing production. Mias. ind. SSSR 29
no.6:8-13 '58. (MIRA 11:12)

1.Semipalatinskiy myasokombinat.
(Meat industry--Equipment and supplies)

BRAZHNIKOV, V.

Wages in mixed brigades in mining. Sots. trud 5 no.6:135-136 Je '60. (MIRA 13:11)

1. Nachal'nik otdela truda i zarplaty Irtyshskogo polimetallicheskogo kombinata.

(Irtysh--Nonferrous metal industries)
(Wage payment systems)

BRAZHNIKOV, V. A.

Shenk, N. A. and Brazhnikov, V. A. - "Prosthesis of children after the amputation of a hip and a leg," Trudy Tsentr. nauch.-issled. in-ta protezirovaniya i protezostroyneiya, symposium 3, 1949, p. 132-58

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

BRAZHNIKOV, V. A.

Estimating the tolerance of bombing armament units of military aeroplanes. Moskva, Glav. red. aviatsion noi lit-ry, 1946. 119 p. (50-22064)

UF767.B67

BRAZHNIKOV, V. A

BRAZHNIKOV, V. A.

Raschet dopuskov v agregatakh bombardirovochnogo vooruzheniia samoletov. Moskva, Glav. red. aviats. lit-ry, 1946. 119 p., diagrs.

Bibliography: p. 112.

Title tr.: Computation of tolerances for units of aircraft bombing equipment.

Reviewed by S. D. Kartashkin and A. N. Melikov in Tekhnika vozdushnogo flota, 1947, no. 5, p. 41.

UF767.B67

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

BRAZHNIKOV, V. A., Engineer

"Calculation of Tolerances in the Bombardment Armament Assemblies of an Airplane." Sub 6 Mar 47, Moscow Aviation Technological Inst

Dissertations presented for degrees in science and engineering in Moscow in 1947

SO: Sum No. 457, 18 Apr 55

Cand. Tech. Sci.

KUZ'MIN, V.A.; BRAZHNIKOV, V.A.

Dynamic properties of p-n-p-n type devices. Radiotekh. i elektron. 8 no.7:1193-1198 Jl '63. (MIRA 16:8)

(Transistors)

KULIKOVSKIY, L.F.; KARPOV, Ye.M.; POPOVA, G.V.; BRAZHNIKOV, V.A.

Drilling footage recorder. Izv. vys. ucheb. zav.; neft' i gaz. 8 no.4:91-94 '65. (MIRA 18:5)

1. Kuybyshevskiy politekhnicheskiy institut im. V.V.Kuybysheva.

[illegible], V.A. 50 c

L 41182-65 EWT(d)/EWP(c)/EWP(v)/T/EWP(k)/EWP(l) Pf-4
ACCESSION NR: AP5004677 S/0115/64/000/009/0058/0059 70
18
B

AUTHOR: none

TITLE: Fourth scientific and technical conference on "Cybernetics for the improvement of measurement and inspection methods"

14

SOURCE: Izmeritel'naya tekhnika, no. 9, 1964, 58-59

9M

TOPIC TAGS: cybernetics, electric measurement, electric quantity instrument, digital computer, electronic equipment, electric engineering conference

ABSTRACT: The conference was held 1-4 July at the All-Union Scientific Research Institute of Metrology by the Section of Electrical Measurements of the Council on the Problem of "Scientific Instrument Making" of the State Committee on Coordination of Scientific Research Work in the USSR together with the All-Union Scientific Research Institute of Electrical Measurement Instruments and the Leningrad Regional Administration of the Scientific and Technical Division of the Instrument Making Industry. More than 400 delegates from 29 cities of the country participated. Fifty-seven reports were heard and discussed. Reports were given by: P. V. NOVITSKIY (Leningrad)--"Definition of the Concept of Informational Error in Measurement and its Importance in Practical Use" and "On the Problem of the Average Informational Criterion of Accuracy Throughout the Entire Scale of an Instrument"; Ya. A.

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KUPERSHMIDT (Moscow)--"On Determination of the Criteria of Accuracy for Measurement Devices"; S. M. MANDEL'SHTAM (Leningrad)--report on a new criterion of accuracy of measurement instruments; P. F. PARSHIN (Leningrad)--report on optimization when using Fourier transforms on electronic digital computers; S. P. DMITRIYEV, G. Ya. DOLGINTSEVA and A. A. IGNATOV (Leningrad)--proposal of a new method for solving problems of optimum filtering for non-stationary random signals and interference; I. B. CHELPANOV--"Calculation of the Dynamic Characteristics of an Optimum Complex Two-Channel System which Uses Signals from a Position Meter and from a Speed Meter"; R. A. POLUEKTOV (Leningrad)--"Optimum Periodic Correction in the Measurement of Continuous Signals"; S. P. ADAMOVICH (Moscow)--"Analysis and Construction of Devices for Correction of Non-linearity and Scaling for Unitary Codes; G. V. GORELOVA (Taganrog)--"A Method for Statistical Optimization in Graduating the Scales of Electrical Measuring Instruments"; M. A. ZEMEL'MAN (Moscow)--"Analog-Digital Voltage Converter with Automatic Error Correction"; B. N. MALINOVSKIY, V. S. KALENCHUK and I. A. YANOVICH (Kiev)--"Automatic Monitoring of the Parameters of the Electrical Signals of Complex Radio and Electronic Equipment"; V. P. PEROV (Moscow)--"Operational Cybernetics as an Independent Scientific Specialization"; Ye. N. GIL'BO (Leningrad)--"On the Problem of Effective Non-linear Scales"; A. I. MARKELOV (Moscow)--"Devices for Preliminary Processing of the Results of Measurements Presented in the Form of

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Graphic Recordings For Subsequent Introduction of the Information into Universal Digital Computers"; O. M. MOGILEVER and S. S. SOKOLOV (Leningrad)--"On a Method for Reducing Excess Information"; T. V. NIKOLAYEVA (Leningrad)--"A Device for Temporal Discretization of Continuous Signals"; A. A. LYOVIN and M. L. BULIS (Moscow)--"Optimization of the Transmission of Telemetric Information as a Means for Raising the Efficiency and Eliminating Interference"; D. E. GUKOVSKIY (Moscow)--"On a Statistic Approach to the Detection of Events in Automatic Inspection"; M. I. LANIN (Leningrad)--"Method for Calculating the Holding Time of Communications in a Contralized Inspection System or Constant Servicing Time"; O. N. BRONSHTEYN, A. L. RAYKIN and V. V. RYKOV (Moscow)--"On a Single-Line Mass Service System with Losses"; V. M. SHLYANDIN (Penza)--report on circuit designs for direct compensation electrical digital measuring instruments; A. N. KOMOV (Novocherkassk)--report on a new method for compensation of digital bridges; M. N. GLAZOV (Leningrad)--report on the problem of voltage-to-angular rotation conversion; V. S. GUTNIKOV (Leningrad)--"Methods for Construction of Frequency Capacitance Pickups with a Linear Scale"; R. Ya. SYROPYA OVA and R. R. KHARCHENKO (Moscow)--report on the determination of the amplitude-frequency and phase characteristics of PFM and PWM modulators; Ye. I. TENYAKOV (Novocherkassk)--"The Phototransistor as a Switch for Electrical Measurement Purposes"; N. V. MALYGINA (Leningrad)--a report on ways for making universal equipment for measurement of current, voltage and power; P. P. ORNATSKIY and V. I. ZOZULYA (Kiev)--reports on the construction of static voltmeters, wattmeters and

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phase motors; A. V. TRIKHANOV, I. G. SMYSHLYAYEV, N. I. SABLIN, V. M. RAZIN and V. A. GORBUNOV (Tomsk)--report on a device for automatic processing of the measurements of vibration amplitude of pneumatic hammers; L. K. RUKINA and V. G. KNORRING (Leningrad) --report on the development of a digital compensator for measuring pressure, force, etc.; N. B. DADUKINA (Leningrad)--report on a method for constructing frequency pickups for gas analysis; Ye. M. KARPOV, V. A. BRAZHNIKOV and B. Ya. LIKHTTSINDER (Kuybyshev)--reports on analysis and recording of boring speeds; Yu. V. PSHENICHNIKOV (Kuybyshev)--"A High Speed Voltage-to-Digital Code Converter for ac Pickups"; G. P. VIKHROV and V. K. ISAYEV (Vilna)--"A Highly Accurate Digital Peak-to-Peak Voltmeter"; and S. M. PERSIN (Leningrad)--"A Low Level Analog-Digital Voltage Converter."

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: EE, EC

NO REF SOV: 000 OTHER: 000 JPRS

me

Card 4/4

BRAZHNIKOV, V. I.

Brazhnikov, V. I. "Apparatus for the recirculation of feed water," Trudy Novocherkas. politekhn. in-ta im. Ordzhonikidze, Vol. XVIII, 1948, p. 5-10

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

BRAZHNIKOV, V. I.

Brazhnikov, V. I. "From an experiment on reconditioning a turbine," Trudy Novocherkas. politekhn. in-ta im. Ordzhonikidze, Vol. XVIII, 1948, p. 11-16

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

BRAZHNIKOV, V.I., kandidat tekhnicheskikh nauk; ALEKSANDROV, A.I.,
inzhener.

Deterioration of radiant superheater tubing of high-pressure
steam boilers. Vest.mash.34 no.1:46-48 Ja '54. (MLRA 7:2)
(Superheaters)

BRAZHNIKOV, V.I., kandidat tekhnicheskikh nauk; ALEKSANDROV, A.I., inzhener.

Damages to boiler tubes due to metal hardening. Vest.mash. 34 no.3:
32 Mr '54.
(MLRA 7:4)
(Steam boilers)

BRAZhNIKOV, V.I

AID P - 870

Subject : USSR/Engineering

Card 1/1 Pub. 29 - 3/23

Author : Brazhnikov, V. I., Kand. of Tech. Sci.

Title : Modernization of low capacity boiler installations

Periodical : Energetik, 10, 6-9, O 1954

Abstract : Such modernization can be very effective if it is based on preliminary analysis of operational data and experience. The author gives some examples from operational practice. Three drawings.

Institution : Not given

Submitted : No date

BRAZHNIKOV, V.I., dotsent, kandidat tekhnicheskikh nauk. Nauch. trudy NPI 26:355-362 '55.
(Stokers, Mechanical)
(MLRA 9:12)

BRAZHNIKOV, V.I.

BRAZHNIKOV, V.I., dots., kand. tekhn. nauk.

Modernization of small-capacity boiler installations. Trudy NPI 27: 173-180 '56. (MIRA 10:12)

1. Kafedra teplosilovykh ustanovok Novocherkasskogo politekhnicheskogo instituta.

(Boilers)

BELIKOV, Ye.F., dots.; SOLOV'YEV, L.P., inzh.; KHRENOV , L.S., prof., red.; BRAZHNIKOV, V.I., ved. red.

[Bibliographic index of geodetic literature for the five-year period 1957-1961] Bibliograficheskii ukazatel' geodezicheskoi literatury za 5 let; 1957-1961. Moskva, Nedra, 265 p. (MIRA 17:7)

PROCESSES AND PROPERTIES INDEX

Ca

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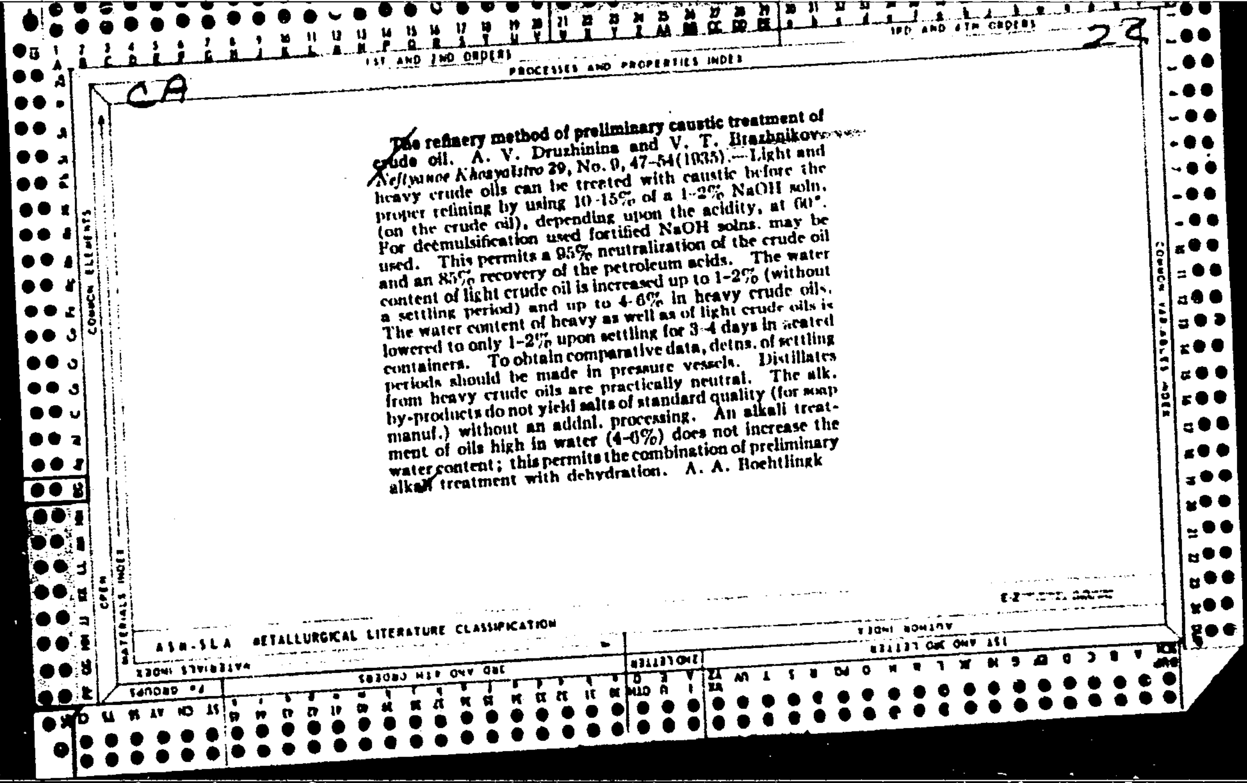
Results obtained in the preliminary caustic treatment of the crude oil in the Nizhnii Novgorod refinery. V. T. Brazhnikov. *Azerbaidzhanskoe Neftyanoe Khosyaistvo* 1935, No. 6, 91-4.—A saving of 42% of acid, 75% of caustic and 55-65% of refined products was obtained when using the following preliminary caustic treatment of the crude oil. The oil on being passed through fuel-oil heat exchangers and towers heated with closed steam was brought up to 65-70°. It was then passed through a pipe having inlets for a dil. NaOH soln. which was injected into the pipe, thus accompanying the crude oil during its passage through a 5-m. section of the pipe. The crude oil and the dil. caustic were received in a heated settler, the oil was passed directly into the Borrmann stills, while the dil. NaOH was brought up to 4-5°Bé. NaOH and used again. Because of the presence of saponified petroleum fractions in the water, emulsions were not formed. The NaOH consumption amounted to 0.206% and the loss in oil was 2.42%. The refined products were of a higher grade than those obtained in the usual procedure. A. A. B.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION


1ST AND 2ND ORDERS
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MATERIALS INDEX
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

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The refinery method of preliminary caustic treatment of crude oil. A. V. Druzhinina and V. T. Brazhnikov. *Neftyanoe Khozyaistvo* 29, No. 9, 47-54(1935).—Light and heavy crude oils can be treated with caustic before the proper refining by using 10-15% of a 1-2% NaOH soln. (on the crude oil), depending upon the acidity, at 60°. For deemulsification used fortified NaOH solns. may be used. This permits a 95% neutralization of the crude oil and an 85% recovery of the petroleum acids. The water content of light crude oil is increased up to 1-2% (without a settling period) and up to 4-6% in heavy crude oils. The water content of heavy as well as of light crude oils is lowered to only 1-2% upon settling for 3-4 days in heated containers. To obtain comparative data, detns. of settling periods should be made in pressure vessels. Distillates from heavy crude oils are practically neutral. The alk. by-products do not yield salts of standard quality (for soap manuf.) without an addnl. processing. An alkali treatment of oils high in water (4-6%) does not increase the water content; this permits the combination of preliminary alkali treatment with dehydration. A. A. Boehtlingk